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| APPLICATION NO.                        | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO.     | CONFIRMATION NO |  |
|--|-------------|----------------------|-------------------------|-----------------|--|
| 09/990,955                             | 11/16/2001  | Mitradev Boolell     | PCS10382ARTB            | 2910            |  |
| 7590 11/03/2004                        |             | EXAMINER             |                         |                 |  |
| Gregg C. Benson                        |             |                      | KWON, BRIAN YONG S      |                 |  |
| Pfizer Inc. Patent Department, MS 4159 |             |                      | ART UNIT                | PAPER NUMBER    |  |
| Eastern Point Road<br>Groton, CT 06340 |             |                      | 1614                    |                 |  |
|  |             |                      | DATE MAILED: 11/03/2004 |                 |  |

Please find below and/or attached an Office communication concerning this application or proceeding.

| -   |   | Application No.  |  | Applicant(s)  |  |
|---|---|--|--|---|--|
| Off: -  | Andinu O  | 09/990,955   | E  | BOOLELL, MITRADEV   |  |
| Office /  | Action Summary  | Examiner   |  |   |  |
|   |   | Brian S Kwon   | 1  | 614   |  |
| The MAILIN Period for Reply   | IG DATE of this communication   | n appears on the cov   | er sheet with the cor  | respondence address   |  |
| - Extensions of time may after SIX (6) MONTHS - If the period for reply sp - If NO period for reply is - Failure to reply within the Any reply received by the second second second second second second second second seco | TATUTORY PERIOD FOR R<br>TE OF THIS COMMUNICATI<br>be available under the provisions of 37 C<br>from the mailing date of this communication<br>ecified above is less than thirty (30) days,<br>specified above, the maximum statutory is<br>e set or extended period for reply will, by<br>the Office later than three months after the<br>stment. See 37 CFR 1.704(b). | FR 1.136(a). In no event, ho on, a reply within the statutory reperiod will apply and will expired the statutory reperiod will apply and will expired the source that the sour | wever, may a reply be timely<br>ninimum of thirty (30) days w<br>e SIX (6) MONTHS from the | filed  If be considered timely, mailing date of this communication, |  |
| Status  | (-)   |  |  |   |  |
| 1) Responsive   | to communication(s) filed on  | 03 May 2004  |  |   |  |
| 2a)☐ This action is   |   | This action is non-fi  | 201  |   |  |
|   | plication is in condition for all   | Owance except for f  | iai.   |   |  |
| closed in acc   | ordance with the practice und   | der Ev nade Ouavlo   | 1025 C.D. 11, 452  | cution as to the merits is  |  |
|   |   | co Ex parte Quayle,  | 1935 C.D. 11, 453 (  | J.G. 213,   |  |
| Disposition of Claims   |   |  |  |   |  |
|   | 9 and 10 is/are pending in the  |  |  |   |  |
| 4a) Of the abo  | ove claim(s) is/are with  | idrawn from conside  | ration.  |   |  |
| 5) ☐ Claim(s)   |   |  |  |   |  |
|   | 9 and 10 is/are rejected.   |  |  |   |  |
|   | is/are objected to.   |  |  |   |  |
|   | _ are subject to restriction ar   | nd/or election require   | ment.  |   |  |
| Application Papers  |   |  |  |   |  |
| 9) The specificati  | on is objected to by the Exan   | niner  |  |   |  |
| 10) ☐ The drawing(s   | ) filed on is/are: a)   | accepted or b)☐ ob   | ected to by the Eval   | minor   |  |
| Applicant may r   | not request that any objection to   | the drawing(s) be held   | in ahevance See 37   | CED 1 95(a)   |  |
| Replacement d   | rawing sheet(s) including the cor   | rection is required if th  | e drawing(s) is objects  | dto Soo 27 CED 4 404(4)   |  |
| 11)☐ The oath or de   | claration is objected to by the   | Examiner. Note the   | attached Office Act  | ion or form PTO 152   |  |
| Priority under 35 U.S.C   |   |  | andoned Office Act   | 1011 01 101111 P 1 O-152.   |  |
|   | •   |  |  |   |  |
| 12) Acknowledgme  | ent is made of a claim for fore   | ign priority under 35  | U.S.C. § 119(a)-(d)  | or (f).   |  |
|   | ome * c) None of:   |  |  |   |  |
| 1.⊠ Certified   | copies of the priority docum  | ents have been rece  | ved.   |   |  |
| 2 Certified   | copies of the priority docume   | ents have been rece  | ved in Application N   | 0   |  |
| 3. Copies (   | of the certified copies of the p  | riority documents ha   | ve been received in  | this National Stage   |  |
| applicati<br>* See the attacher   | on from the International Bur   | eau (PCT Rule 17.2)  | a)).   |   |  |
| oce the attached  | d detailed Office action for a l  | ist of the certified co  | oies not received.   |   |  |
|   |   |  |  |   |  |
| tachment(s)   |   |  |  |   |  |
| Notice of References Cit  | ed (PTO-892)  | 4) 🗍 1   | nterview Summary (PTO-   | 413)  |  |
| Notice of Draftsperson's  | Patent Drawing Review (PTO-948)   | f  | 'aper No(s)/Mail Date  | <b>:</b>  |  |
| Paper No(s)/Mail Date _   | tatement(s) (PTO-1449 or PTO/SB/0   | 08) <u>∐</u> 1   | lotice of Informal Patent /  | Application (PTO-152)   |  |
| Patent and Trademark Office   | <del></del> -   | 이니(  | ther:  |   |  |

Art Unit: 1614

#### **DETAILED ACTION**

### Summary of Action

- I. The amendments filed August 14, 2003 and May 03, 2004 are objected to under 35 USC132 because it introduces new matter into the disclosure.
- II. Claims 1-7 and 9-10 are rejected under 35 USC 112, first paragraph, as failing to comply with the written description requirement.
- III. The rejection of claims 1-7 and 9-10 under 35 USC 102(e) as being anticipated by Wilson et al. (US 6403597 B1) will not be maintained in light of the amendment.
- IV. Claims 1-7 and 9-10 rejected under 35 U.S.C. 103(a) as being unpatentable over Doherty et al. (US 6037346 A) and Wilson et al. (US 6403597 B1), and if necessary further in view of Bell-Huff et al. (EP 0960621 A2) and Ellis (WO 94/28902).

#### Status of Application

1. Receipt is acknowledged of applicant's filing of the instant application as a Request for Continued Examination (RCE) under 37 CFR 1.114.

# Response to Amendment

2. The amendment filed August 14, 2003 is objected to under 35 U.S.C. 132 because it introduces new matter into the disclosure. 35 U.S.C. 132 states that no amendment shall introduce new matter into the disclosure of the invention. The added material which is not supported by the original disclosure is as follows: "without co-administration of an estrogen agonist/antagonist".

Applicant is required to cancel the new matter in the reply to this Office Action.

Art Unit: 1614

3. The amendment filed May 03, 2004 is objected to under 35 U.S.C. 132 because it introduces new matter into the disclosure. 35 U.S.C. 132 states that no amendment shall introduce new matter into the disclosure of the invention. The added material which is not supported by the original disclosure is as follows: "but not including buccally or sublingually".

Applicant is required to cancel the new matter in the reply to this Office Action.

## Claim Rejections - 35 USC § 112

The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

4. Claims 1-7 and 9-10 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention.

The claims in this application introduce two negative limitations as discussed in preceding comments, namely "without co-administration of an estrogen agonist/antagonist" and "but not including buccally or sublingually". The examiner determines that when all evidences in the original disclosure are considered and carefully reviewed, the newly amended claims fail to find support in the original specification.

The specification discloses that as an embodiment of the invention, the PDE5 inhibitors can be combined with one or more additional active agents for the treatment of PD in patients

Art Unit: 1614

with normal erectile function (page 16, lines 14-16). Furthermore, the specification provides examples of various suitable agents for the claimed invention including estrogen agonist/antagonist (page 16, line 14 thru page 19, line 15). Specifically in page 17, lines 25-29, raloxifene or lasofoxifen and (-)-cis-6-phenyl-5-{4-(2-pyrrolidin-1-yl-ethoxy)-phenyl}-5,6,7,8-tetrahydronaphthalene-2-ol are disclosed as preferred estrogen agonists and/or estrogen antagonists. In addition, the specification discloses that the PDE5 inhibitors can be administered orally, buccally or sublingually in the tablets, capsules, multi-partculates, gels films, ovules, elixirs, solutions or suspension, which contain flavoring or coloring agents, for immediate-, delayed-, modified-, sustained-, pulsed- or controlled- release applications; and the PDE5 inhibitors may also administered as fast-dispersing or fast-dissolving dosage forms or in the form or a high energy dispersion or as coated particles (page 11, lines 9-15).

Therefore, it would have been clear to one skilled in the art, reading the instant disclosure, that the claimed invention can be practiced with (i) the PDE5 inhibitor in combination with other active agents disclosed in the specification including estrogen agonist/antagonist, not excluding estrogen agonist/antagonist as newly amended claims, and (ii) buccal or sublingual administration, not excluding buccally or sublingually.

As stated above, the specification only positively states about the boundaries of the claim. There is no express statement about the negative limitation that can be found in the specification. Thus, the exclusion of said elements implies the inclusion of all other elements not expressly excluded, clearly illustrating that such negative limitations do, in fact, introduce new matter. The negative limitation recited in the present claims, which did not appear in the specification filed,

Art Unit: 1614

introduces new concepts and violate the description requirement of the first paragraph of 35 USC 112.

### Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

The factual inquiries set forth in *Graham* v. *John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

- 1. Determining the scope and contents of the prior art.
- 2. Ascertaining the differences between the prior art and the claims at issue.
- 3. Resolving the level of ordinary skill in the pertinent art.
- 4. Considering objective evidence present in the application indicating obviousness or nonobviousness.
- 5. Claims 1-7 and 9-10 rejected under 35 U.S.C. 103(a) as being unpatentable over Doherty et al. (US 6037346 A) and Wilson et al. (US 6403597 B1), and if necessary further in view of Bell-Huff et al. (EP 0960621 A2) and Ellis (WO 94/28902).

Doherty teaches the use of type V phosphodiesterase inhibitor (e.g., sildenafil, pyrazolopyrimidinone, zaprinast) for treating erectile dysfunction including premature ejaculation via local administration (abstract; column 5, lines 42-53; column 7, lines 11-15; claims), wherein said PED5 inhibitor is given a daily in the rage of approximately 0.1 to

Art Unit: 1614

500mg/day. Doherty also teaches that oral and parenteral administration of phosphodiesterase inhibitors are known for the treatment of erectile dysfunction (column 3, lines 7-11).

Wilson teaches the use of type V phosphodiesterase inhibitor (e.g., sildenafil, pyrazolopyrimidinone, zaprinast) for treating erectile dysfunction including premature ejaculation via transmucosal (i.e., buccal or sublingual) or local administration, wherein said PED5 inhibitor is given a daily in the rage of approximately 0.1 to 500mg/day.

Bell-Huff and Ellis teaches an oral, parenteral or sublingual or buccal administration of phosphodiesterase inhibitors such as sildenafil (5-[2-ethoxy-5-(4-methylpiperazin-1-ylsulphonyl)-phenyl]-1,6-dihydro-1-methyl-3-propylpyrazolo[4,3-d]pyrimidin-7-one).

The teaching of Doherty differs from the claimed invention in the use of PDE 5 inhibitor in "normal erectile function" and in oral form.

Although the reference is silent about the efficacy of PDE5 inhibitor in the treatment of premature ejaculation with "normal erectile function" patient, one having ordinary skill in the art would have motivated to apply the claimed PDE5 inhibitor (e.g., sildenafil), with reasonable expectation of success, to treat patients with premature ejaculation regardless of normal erectile function or erectile dysfunction. One having ordinary skill in the art would have known that PDE5 inhibitor would be effective in treating premature ejaculation in patients with "normal erectile function" as well as erectile problem patient. The state of the premature ejaculation treatment art does not distinguish between patient with "normal erectile function and patient with erectile function problem. Rather, the prior art generally teaches that any effective agents for the treatment of premature ejaculation would be effective in treating premature ejaculation regardless of "normal erectile function" or erectile problem. Based on the

Art Unit: 1614

state of the prior art, differences in "normal erectile function" will not support the patentability of subject matter encompassed by the prior art unless there is evidence indicating such "normal erectile function" is critical.

In addition, those of ordinary skill in the art would have been readily optimized effective dosage form as determined by good medical practice and the clinical condition of the individual patient. Determination of the appropriate dosage form for treatment involving each of the above mentioned formulations is routinely made by those of ordinary skill in the art and is within the ability of tasks routinely performed by them without undue experimentation, especially in light of known dosage forms of PDE5 inhibitor such as sildenafil citrate. Thus, one having ordinary skill in the art would have been motivated to make such modification to extend the usage of said PDE5 inhibitor by making the formulation in oral form to accommodate patient's preference and needs where the compliance could be greatly improved.

It is noted applicant that Wilson, Bell-Huff and Ellis references are being supplied as references to demonstrate known dosage formulations of PDE5 inhibitors (i.e., oral, buccal or sublingual, intravenous, topical, etc...) in the state of art.

## Response to Arguments

6. Applicant's arguments filed May 03, 2004 have been fully considered but they are not persuasive.

In response to the rejection of the claims under 35 USC 112, first paragraph, as failing to comply with the written description requirement, applicant alleges that the specification clearly contemplates the use of PDE5 inhibitors without such agents ("the PDE5 inhibitors may also be

Art Unit: 1614

combined with one or more additional active agents for treating PD"). Applicant alleges that the use of the term <u>may</u> with reference to the use of combination agents clearly indicates that one embodiment of the invention is that the PDE5 inhibitors may be used without one or more additional agents.

The examiner disagrees with applicant's argument, and maintains that the negative claim limitations lack description in the specification. It appears that the applicant in this instant application attempts to avoid a prior art reference by excluding "co-administration of an estrogen agonist/antagonist" and "buccally or sublingually" administration. However, there is no distinguishable (patentable) reason to exclude "co-administration of an estrogen agonist/antagonist" and "buccally or sublingually" administration from the disclosed examples of various suitable agents and the disclosed mode of administrations. Furthermore, the exclusion of said element implies the inclusion of all other elements not expressly excluded, clearly illustrating that such negative limitations do, in fact, introduces new matter.

#### Conclusion

- 7. Amendment to the claims to remove new matter as set forth in this Office Action, absent other amendatory language, may necessitate reinstatement of previously made rejection(s) over prior art under 35 USC 102 and/or 35 USC 103.
- 8. No Claim is allowed.
- 9. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Brian Kwon whose telephone number is (571) 272-0581. The examiner can normally be reached Tuesday through Friday from 9:00 am to 7:00pm.

Art Unit: 1614

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Christopher Low, can be reached on (571) 272-0951. The fax number for this Group is (703) 872-9306.

Any inquiry of a general nature of relating to the status of this application or proceeding should be directed to the Group receptionist whose telephone number is (571) 272-1600.

Brian Kwon Patent Examiner AU 1614

**VICKIE KIM** Pr**ima**ry Examiner

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